

iOS SDK Release Notes for iOS 10 Beta



Introduction	3
Bug Reporting	3
Autosubmission of Diagnostic and Usage Data	3
Functionality not in iOS 10 Beta 1	4
Notes and Known Issues	4
AdSupport framework	4
Airplay	4
App Store	4
Apple Pay	4
Apple Pencil	5
Apple TV	5
AppleID Login	5
AVFoundation Capture	5
Backup	5
Binary Compatibility	5
CarPlay	6
CFNetwork HTTPProtocol	6
CFNetwork Session	6
CloudKit	7
Contacts	7
Exchange Account Setup	7
FaceTime	7
Guided Access	7
HomeKit	7
iBooks	8
ImageIO	8
Keyboards	8
libdispatch	8
Lock Screen	8
Messages	8
Music	9
Notifications	10
NSUserActivity	11
Performance	11

Photos	11
Quick Reply	11
Safari	12
SFSafariViewController	12
Shared iPad	12
Siri.....	12
SiriKit	12
Spotlight.....	13
Swift Playgrounds.....	13
UIKit	14
Watch App.....	17
Widgets	17
Xcode.....	18

Introduction

iOS SDK 10.0 beta 1 provides support for developing iOS apps. It's packaged with a complete set of Xcode tools, compilers, and frameworks for creating apps for iOS and OS X. These tools include the Xcode IDE and the Instruments analysis tool, among many others.

With this software you can develop apps for iPhone, iPad, or iPod touch running iOS 10. You can also test your apps using the included Simulator, which supports iOS 10. iOS SDK 10.0 requires a Mac computer running OS X v10.10.3 (Yosemite) or later.

This version of iOS is intended for installation only on devices registered with the Apple Developer Program. Attempting to install this version of iOS in an unauthorized manner could put your device in an unusable state.

For more information and additional support resources, visit <http://developer.apple.com/programs/ios/>.

Bug Reporting

For issues not mentioned in the Notes and Known Issues section, please file bugs through the Apple Developer website <https://developer.apple.com/bug-reporting/ios/>. Additionally, you may discuss these issues and iOS SDK 10.0 in the Apple Developer Forums at <https://forums.developer.apple.com/community/beta/ios-10-beta>. To get more information about iCloud for Developers, go to <http://developer.apple.com/icloud>.

Autosubmission of Diagnostic and Usage Data

By default, the iOS 10.0 beta 1 automatically sends anonymous diagnostic and usage data back to Apple. This includes information about crashes, freezes, kernel panics, and information about how you use Apple and third-party software, hardware, and services. This information is used to help Apple improve the quality and performance of its products and services. You can stop autosubmission of diagnostics and usage data by going to Settings > Privacy > Diagnostics and Usage > Don't Send.

Functionality not in iOS 10 Beta 1

- Faces in the Photos app do not sync across your devices.
- Voicemail transcription is not supported in iOS 10 beta 1.
- Functionality that requires adoption from App Store apps, such as iMessage apps, SiriKit, and Maps extensions, will not be available until those apps are able to adopt and submit to the Store.
- Support for rich notifications is optimized for 3D Touch, and in iOS 10 beta 1 the feature is available only on iPhone 6s and iPhone 6s Plus. Future betas will provide access to this functionality for users of iPhone models without support for 3D Touch.

Notes and Known Issues

AdSupport framework

Vendor and advertising identifiers change after iOS upgrade.

Airplay

Attempting to mirror a device running iOS 10 to an Apple TV via Airplay may fail.

App Store

- While testing In-App Purchases in the sandbox, the first authentication dialog may appear twice.

Workaround: Fill each of the authentication dialogs.

- While testing an In-App Purchase in the sandbox with hosted content, the password dialog appears every time the app is brought to the foreground while the download is still in progress.

Apple Pay

- Initiating an Apple Pay transaction in Safari on a Mac displays an empty payment sheet if Apple Pay hasn't been set up on your iPhone.

Workaround: Add a credit or debit card to Apple Pay on your iPhone.

- Apple Pay payment sheet fields cannot be accessed if a payment request fails due to a server connection or TouchID/passcode error.

Workaround: Tap the Cancel button on the payment sheet, address the cause of the failure, and try again.

- The shipping method displays as <?> with garbage data if the shipping method is set to None and the shipping address is required.

Apple Pencil

When drawing in from the edge of iPad with Apple Pencil, reported tilt and azimuth angles may occasionally have large errors. In these cases, the angles are always reported as estimated.

Workaround: When angles are reported as estimated, use the first nonestimated value to backfill. The sample code *SpeedSketch* has a potential implementation for this.

Apple TV

When setting up an Apple TV using Tap to Setup on an iOS device, you may not be able to proceed beyond the Network Connected screen.

Workaround: Tap the Menu button to go back, then proceed forward through the setup process again.

AppleID Login

Some accounts with two-factor authentication enabled may not be able to log in using a verification code sent to another device.

Workaround: Tap “Didn’t get a verification code?” and complete authentication using a text message.

AVFoundation Capture

- Capture of raw images occasionally fails on iPhone SE.
- Live Photo movies are not delivered when capturing with `AVCapturePhotoOutput`.

Workaround: Create an `AVAsset` object using the Live Photo movie file URL set on the `AVCapturePhotoSettings` object. For an example of this workaround, see the *AVCam* sample code in `capturePhoto()`.

Backup

- Users may not be able to restore from iCloud backups created on iOS 8 and earlier. Users will be presented with a dialog box displaying the error “Cannot Restore Backup.”

Workaround: Restore the iOS 8 backup to a device running iOS 9, and then upgrade to iOS 10 beta 1.

- When restoring from an iCloud backup, some accounts may take a few minutes to display the list of backups.

Binary Compatibility

- Apple reserves two-letter prefixes for use in framework classes. When naming your own classes, please use a three-letter prefix. The guidelines can be reviewed here:

<https://developer.apple.com/library/ios/documentation/Cocoa/Conceptual/ProgrammingWithObjectiveC/Conventions/Conventions.html>

Failure to follow these guidelines could result in your app crashing during beta software releases.

- Upon recompiling with iOS 10.0, calling `[NSObject valueForKey:]` with a `nil` key throws an exception. Previously, this led to undefined behavior; now, it causes your app to crash.
- Referencing a system font by name in a call to `+UIFont fontWithName:size:` causes a crash. For more information, see <https://developer.apple.com/videos/play/wwdc2015/804/>
- To improve customer privacy, `https://` URLs, `NSURLSession`, and `NSURLConnection` no longer support RC4 cipher suites during the TLS handshake. Affected apps and services should upgrade web servers to use more modern cipher suites.
- Apps may hang if they change a superview's geometry in `viewWillLayoutSubviews` or `layoutSubviews`.
- `NSURLConnection` disallows connections that use TLS protocol versions lower than the protocol version specified by an ATS policy via the `NSExceptionMinimumTLSVersion` or `NSThirdPartyExceptionMinimumTLSVersion` keys. Affected apps and services should upgrade web servers to use more modern TLS protocol versions.
- Third party apps may not be able to play back Music if the Music app has been removed.
Workaround: Restore the Music app from the App Store.

CarPlay

You may experience disconnects while connected to CarPlay.

CFNetwork HTTPProtocol

- The `NSMutableURLRequest` class requires that the `HTTPBodyStream` property be an unopened stream, and the `NSURLConnection` and `NSURLSession` classes now strictly enforce this unopened stream requirement. Affected apps should ensure that any `NSInputStream` that is provided has not yet been opened.
- Apps that use `UIWebView` and also implement `NSURLProtocol` subclasses that block threads, will experience `NSURLSession` and `NSURLConnection` load delays. This issue is specific to beta 1 and is addressed in beta 2.

CFNetwork Session

You may see an issue where checking for a software update in tvOS results in the error “The update was not successful.” If a second attempt is unsuccessful, please file a bug indicating the time of the issue and your local network setup.

Additionally, NSURLSession background transfers that use HTTP/2 or SPDY may cause inefficient use of TCP connections, such that subsequent requests (which may use HTTP/1.1) could be delayed up to one minute per TCP connection before they can start. System services may also be similarly impacted. This should be resolved in a future beta release of iOS 10.

CloudKit

- Saving a child record with its parent property set to `nil` can sometimes fail.
- Long-lived operations return the error, “You don’t have permission to save the file.”

Contacts

After creating a new contact, tapping Cancel does not exit the contact card.

Workaround: Quit the app and relaunch.

Exchange Account Setup

Adding an Exchange account either manually or via configuration profile may fail, resulting in a state where the account is visible in Settings, but data does not sync.

Workaround: In Settings, remove the account and/or the configuration profile and try adding the account again.

FaceTime

Once removed, FaceTime cannot be restored on iPad or iPod touch.

Workaround: Place FaceTime calls from the Contacts app.

Guided Access

You cannot exit Guided Access after enabling it while using an app.

Workaround: If you have a passcode set on your device, restart your device by holding the Sleep/Wake and Home buttons together for eight seconds. If you do not have a passcode set on your device, wait for the device’s battery to drain to 0%.

HomeKit

- Adding WAC HomeKit accessories might fail using the Home app if the network credentials are not first provided using the Settings > Wi-Fi > Set Up New Device option.

Workaround: If adding such a HomeKit accessory fails, provide the network credentials using Settings > Wi-Fi > Set Up New Device. After the accessory has joined the network, the accessory can be added using the Home app.

- HomeKit may be unable to synchronize and an “Enable Keychain” dialog is displayed even though iCloud Keychain is already enabled.

Workaround: Log out of the affected iCloud account on every device and then log back in again.

iBooks

If you select an unpurchased book when viewing a series on your bookshelf and then attempt to download the sample from the product page, iBooks will crash.

ImageIO

- Some embedded images in the Twitter app appear low-resolution.
- Saving optimized images using `kCGImageDestinationOptimizeColorForSharing` is not available in iOS 10 beta 1.

Keyboards

- In Spotlight, when typing in Chinese or Japanese with hardware keyboards, the candidate bar is not in a fixed position.
- Text replacements created on iOS 10 beta 1 might be lost after updating to subsequent iOS 10 betas.

libdispatch

Libdispatch asserts if there is a hang detected due to a deadlock in `dispatch_barrier_sync`.

Lock Screen

- Scrolling horizontally on the lock screen may be difficult or not work (touch input can be blocked by lock screen elements such as Music controls and album art).

Workaround: Scroll in an empty region of the lock screen.

- Sliding up on the Continuity icon (bottom left corner) does not work.

Workaround: Slide from outside of the Continuity icon, on the right side.

Messages

- When Messages extensions are in edit mode, it can take multiple attempts to delete by tapping on the “X.”

Workaround: Tap on the lower portion of the “X.” (It may take several attempts.)

- When `UISearchController` and `UITableViewController` are used in Messages extensions, their content can be hidden below the top bar.

Workaround: Use insets of around 80px on top and 40px on the bottom.

- Occasionally, when third party Messages extensions insert a message bubble, the bubble appears blank.

Workaround: Scrolling through the current conversation or switching to another conversation and then back may resolve the issue.

- Tapping on a sticker while a sticker pack app is in expanded view does not stage the sticker.

Workaround: Use the peel animation by tapping and holding on the sticker.

- Stickers peeled off and dropped back in the browser disappear.

Workaround: Swipe away and then back to the extension.

- When a third party message bubble is selected with the extension in the foreground, `willSelectMessage:conversation:` and `didSelectMessage:conversation:` are not triggered.
- `#images` is shown in Messages for unsupported locales and fails to load.
- In Simulator only, when `localizedChangeDescription` in the `insertMessage:localizedChangeDescription:completionHandler:` method is set to `$localParticipantIdentifier.UUIDString`, the `$localParticipantIdentifier.UUIDString` is not replaced with the user's Messages ID, and the UUIDString is printed as-is.
- When the Messages app in Simulator is force quit, message history is lost.
- Calling `dismiss` on an expanded `MSMessagesAppViewController` changes the presentation style to `.compact` instead of dismissing the controller. Calling `dismiss` when the controller is already in compact mode will dismiss the controller.
- When inspecting an incoming third party message, the `senderParticipantIdentifier` property of `selectedMessage` is `nil`.
- When a `UIAlertController` object is presented in a Messages extension, it is truncated by the bottom bar of the extension.
- Accessibility labels set to third party messages are not spoken when VoiceOver is enabled.

Music

This release introduces an all-new design for Apple Music that brings greater clarity and simplicity to every aspect of the experience.

Notes about Apple Music in iOS 10 beta 1:

- After joining Apple Music for the first time, you may need to force quit Music to reflect your new membership.
- You can skip to the next or previous track, but to rewind or fast forward within a song, you must move the play position in the progress bar.
- Radio tab appears in all countries, including countries where it is not available.
- Recently Played in For You may not refresh instantly.

- Tapping on the name in an album or playlist does not yet take you to the artist or curator page.
- Tapping on the name in Now Playing does not yet take you to the album page.
- When editing a playlist, there is not yet a way to choose new songs to add. To add a song, find the song in Apple Music by using long press or 3D touch, or use the More Options menu and tap “Add to Playlist.”
- Music app does not yet remember where you were or what was playing if the app was force quit.
- On iPad, playlists do not yet include an edit feature.
- On iPad, Music app will unexpectedly lose its place when playing from the Artists menu.
- An `MPMediaPickerController` object may not display as expected.
- Changing Dynamic Type in Settings does not adjust reading size consistently in Music.
- Removing Music app prevents certain accessories from playing podcasts, audiobooks, and other media. Restore Music app from the App Store to resolve unexpected accessory playback control issues.
- Turning off Show Apple Music in Music Settings does not yet hide Apple Music.

When connected to a car, certain features may not work as expected:

- The current song may not update while listening to Apple Music radio stations.
- Editing Up Next may unexpectedly disrupt playback.
- While using CarPlay, View All Stations does not yet display all stations.

Certain Apple Music features will become available in a future beta:

- Connect posts in For You
- For You Mixes
- Progress page for managing active downloads
- Full-screen playback for music videos
- Signing in to Apple Music on Sonos
- Related music suggestions in album pages
- Show Complete Album for Library items
- Display of works and movements for classical music
- Popularity indicators for albums

Notifications

- Audio messages cannot be played from the notification banner or actions in notification lists.

Workaround: Launch the Messages app or 3D Touch on the notification to listen to the audio message.

- Raise to listen/speak does not work for audio messages.
- If a notification provides multiple actions including a text input action, tapping on the text input action when the keyboard is visible has no effect.
- If the notification content extension implements a custom `inputAccessoryView`, text input actions are not delivered when the user taps on the button for that action.

Workaround: The text input action is not necessary if the app is implementing its own custom `inputAccessoryView`. A standard action can be used.

- Notification content extension view controllers are not being released, so extensions may crash during development when memory limits are reached for extensions.

NSUserActivity

An `NSUserActivity` object may not have any `userInfo` after handoff.

Workaround: Explicitly call `becomeCurrent` on the activity object.

Performance

Some devices may experience performance issues, such as hangs and frame drops.

Photos

- Occasionally, playing a Memory movie can cause the Photos app to crash.
- Explicitly call `–[PHLivePhotoView stopPlayback]` to reset live photo playback.
- Attempting to add a paired RAW (DNG) + JPG asset to `PhotoLibrary` using a `PHAssetCreationRequest` will fail.
Workaround: DNG and JPG assets can be saved separately (though they will lose their associated pairing).

- On devices supporting 3D Touch, using the Hide action via 3D touch > Hide This Person causes the Photos app to crash. (When you re-launch Photos, the hide action will have completed successfully.)

Workaround: In Photos > People, tap Select, choose the person you wish to hide, then tap Hide.

- People syncing is not enabled via iCloud Photo Library in iOS 10 beta 1.
- Memories, Related, People and Scene are not supported on 32-bit devices.

Quick Reply

When using legacy Quick Reply, the lock screen idle timer may expire.

Safari

- Content Blockers may stop working after upgrading to iOS 10 beta 1.

Workaround: Go to Settings > Safari > Content Blockers and toggle the content blocker switch.

- Fixed a bug where no progress was shown while downloading large files.
- You can now close all tabs in Safari at once by long tapping on the Tab View button.
- To improve accessibility on websites in Safari, users can now pinch-to-zoom even when a website sets `user-scalable=no` in the viewport.

SFSafariViewController

- Apps can now change the toolbar background color of `SFSafariViewController` using the `preferredBarTintColor` property of `SFSafariViewControllerConfiguration`.
- Tapping the Safari button in an `SFSafariViewController` object now shows a breadcrumb back to the host app.

Shared iPad

- An iPad configured as a student device for use with Classroom will not appear as connected in Classroom app.
- Messages and FaceTime sign in do not work on Shared iPad.
- OTA updates on Shared iPad may fail to complete.

Workaround: Update Shared iPad via iTunes using downloaded IPSW files.

- iCloud documents and data may not finish syncing after logging out. To avoid data loss, ensure that all apps have uploaded their data before logging out.

Siri

- Siri may not provide the desired response when a request requires a removed app.
- Siri Sports queries are not supported in Dutch, Norwegian, or Swedish.
- When reading messages, Siri does not accurately describe new message types or features.
- Pressing and holding the Home button does not engage Siri.

Workaround: Set General > Accessibility > Home Button > Click Speed to Default

- Using Siri to request information from Contacts may result in a crash to the Home screen.

SiriKit

- The Workout domain is currently available only in English.

- Arabic, Hebrew, Finnish, and Malay currently support only the Ride booking and Payments domains.
- `INPaymentMethod` is not valid and will be removed from `INRequestPaymentIntent` and `INRequestPaymentIntent`.
- The identifier property on `INIntent` may not change between Siri requests.
- Siri may not be able to set a new timer duration when the Countdown Timer is already running or paused.

Workaround: Cancel the timer, then ask Siri to set a new timer.

- `INInteraction` objects provided to Intents UI extensions do not have the `INIntentResponse` and `INIntentHandlingStatus` properties populated.
- `resolutionResultUnsupportedWithReason:alternatives:` is not currently supported.
- `IntentsRestrictedWhenLocked` is not currently enforced.
- `needsMoreDetails(for:)` resolution result does not currently work.

Spotlight

- Tapping a result or Search in App button in Spotlight on the lock screen does not unlock the device and launch the corresponding app, even when authenticated.

Workaround: Manually unlock the device and invoke Spotlight again, then tap on the result or Search in App button.

- Removed system apps may be visible when performing Spotlight queries.

Swift Playgrounds

Swift Playgrounds is a brand new app designed to help people learn to code with Swift 3. It offers downloadable content, including Learn to Code Part 1—which teaches the fundamentals of coding in Swift—and additional challenges you can explore. You can also experiment on your own by creating playgrounds based on the templates, create a blank playground, or open playgrounds created in Xcode.

Swift Playgrounds is included with iOS 10 beta.

Notes

- Connect to Wi-Fi to download the Learn to Code and Challenge content. Cellular downloads are not supported.
- To open Swift Playgrounds documents from Xcode, AirDrop the files to your iPad. These Playgrounds must target iOS.
- Swift Playgrounds beta uses Swift 3 (swiftlang-800.0.23.1). Code written using other versions of Swift may not work in Swift Playgrounds beta.
- Swift Playgrounds relies on source code from a number of third parties. For information on these contributions, see the Swift Playgrounds Acknowledgments file, available with the iOS 10 beta.

Known Issues in Swift Playgrounds beta 1

- iCloud Drive is not supported in Swift Playgrounds beta.
- Under some circumstances, the shortcut bar can become unresponsive.
- Swift Playgrounds on iPad does not keep track of whether you've expanded an inline Quick Look for values in the editor. If you edit a Swift 3 playground that had an expanded Quick Look, then they will be collapsed when you save.
- Some items in the Snippets Library can not be dragged to add them to the coding area.
- File literals are not supported in Swift Playgrounds.
- Links and references to symbol names are not rendered in Quick Help content.
- AVFoundation is available, but attempting to capture input returns nothing. For example, AVCapturePreviewLayer is always a blank transparent layer.
- GameController framework is available and appears to successfully connect to controllers, but button handler blocks are never called.
- Not all Learn to Code content is available in Swift Playgrounds beta. Learn to Code Part 2 is coming in later releases.
- In Learn to Code Part 1, the blue character's shadow lags behind the character when moving.
- In Learn to Code Part 1, in the Parameters Placing Two Characters exercise, the `jump()` command is not working properly and therefore it is not possible to jump down a level.
- The following exercises are not solvable in Learn to Code Part 1:
 - Checking for Equal Values (Variables chapter)
 - Round Up the Switches (Variables chapter)
 - Collect the Total (Variables chapter)
 - Random Gems Everywhere (Types chapter)
 - Twin Peaks (Parameters chapter)
 - Build a Loop (World Building chapter)
- In Learn to Code Part 1, do not tap “Run My Code” when you are in the view to select characters.

UIKit

Notes

- Prior to iOS 10, it was possible to override `initWithArrangedSubviews:`, but this was intended as a convenience initializer and implemented as such. We have now enforced this in the headers. As a result, Swift clients can no longer override this method, because Swift initializer rules prevent the override of a convenience initializer.

- In iOS 10, UIKit has updated and unified background management for UINavigationController, UITabBar, and UIToolbar. In particular, changes to background properties of these views (such as background or shadow images, or setting the bar style) may kick off a layout pass for the bar to resolve the new background appearance.

In particular, this means that attempts to change the background appearance of these bars inside of `-[UIView layoutSubviews]`, `-[UIView updateConstraints]`, `-[UIViewController willLayoutSubviews]`, `-[UIViewController didLayoutSubviews]`, `-[UIViewController updateViewConstraints]`, or any other method that is called in response to layout may result in a layout loop.

In some cases you can break these layout loops by ensuring that you always use the same object instance when objects (such as UIImage or UIColor) are required. But in general you should avoid doing this.

Because all appearance parameters are now resolved at one time, there may be some cases where your bar's appearance has changed. In general, best results are obtained by specifying as little as possible for customizing your bar. For example, if you are specifying a `barTintColor` value and specifying an empty UIImage object for the `backgroundImage` property (as is the case when you call `[UIImage new]`, for example) then you should get better results by specifying only the `barTintColor`. Any changes you make to resolve these issues in iOS 10 should also work correctly in iOS 9—if this is not the case, please report bugs with a sample project and a screenshot indicating what the bars should look like.

- In iOS 10, there is a slight UIGestureRecognizer behavior change when removing a currently recognizing (that is, midflight) gesture recognizer from its UIView. Previously, removing the gesture recognizer midflight would not explicitly cancel the gesture recognizer, allowing you to re-add the gesture recognizer back to the same view or to a different view. In iOS 10, calling `-[UIView removeGestureRecognizer:]` on the view of a midflight gesture recognizer explicitly cancels the gesture recognizer. If a user desires to change the view of a midflight gesture recognizer, you can simply call `-[UIView addGestureRecognizer:]` on the view you wish to move the gesture recognizer to.
- Presented view controllers can now affect the status bar appearance even if they were presented from a view controller that did not affect the status bar (for example, a popover). By default, custom view controller presentations are assumed to not affect the status bar; use the `modalPresentationCapturesStatusBarAppearance` property on UINavigationController to allow a presented view controller to participate in status bar appearance.
- It has always been a requirement that UIViewController subclasses call super's implementation of `-awakeFromNib` from their own overrides. Starting in iOS 10, `-awakeFromNib` is correctly annotated with the `NS_REQUIRES_SUPER` attribute to detect implementations that fail to obey this requirement. To fix this warning, ensure that all code paths of your override call `[super awakeFromNib]`.
- When running on iPad, the background color set for a UITableViewCell in a Storyboard is now respected.
- Starting in iOS 10, UITableViewHeaderFooterView supports NSCoder so if a view with this class is in a XIB, it now decodes correctly. The consequence is that apps may exhibit some extra content for these views which did not appear before due to the bug that was fixed.

- For very wide table views where cell layout margins have been automatically increased to follow the readable width, separator insets are now interpreted relative to these left and right margins instead of from the edges of the table view.
- The coalescing of UITouch delivery has been significantly improved, especially in cases where users would both touch the screen and use Apple Pencil at the same time on iPad Pro and the app wasn't able to process them at the incoming rate. In certain scenarios, events still can come in at a higher rate than the display refreshes. This is expected, and your app should anticipate this and handle accordingly.
- In iOS 10, windows that are not full screen do not affect status bar appearance.
- Sending `-layoutIfNeeded` to a view is not expected to move the view, but in earlier releases, if the view had `translatesAutoresizingMaskIntoConstraints == false`, and if it was being positioned by constraints, `-layoutIfNeeded` would move the view to match the layout engine before sending layout to the subtree.

These changes correct this behavior, and the receiver's position and usually its size won't be affected by `-layoutIfNeeded`.

Some existing code may be relying on this incorrect behavior that is now corrected. There is no behavior change for binaries linked before iOS 10, but when building on iOS 10 you may need to correct some situations by sending `-layoutIfNeeded` to a superview of the `translatesAutoresizingMaskIntoConstraints == false` view that was the previous receiver, or else positioning and sizing it before (or after, depending on your desired behavior) `-layoutIfNeeded`.

- Third party apps with custom UIView subclasses using Auto Layout that override `layoutSubviews` and dirty layout on self before calling super are at risk of triggering a layout feedback loop when they rebuild on iOS 10. When they are correctly sent subsequent `-layoutSubviews` calls they must be sure to stop dirtying layout on self at some point (note that this call was skipped in release prior to iOS 10).
- Flippable images work by having two images in an asset, each with a different directionality trait. When you create a derived UIImage object using the `-imageWith...` methods, it is no longer associated with the image asset it came from. To create a flippable template image at runtime, use UIImageAsset.
- The source of the `UIContentSizeCategoryDidChangeNotification` notification is now `UIScreen.main()` instead of `UIApplication.shared()`.
- There are two properties in the `UIViewPropertyAnimator` class and one method in the `UIViewAnimating` protocol that are unavailable in iOS 10 Beta 1.

`UIViewPropertyAnimator`:

```
@property(nonatomic, getter=isManualHitTestingEnabled) BOOL
manualHitTestingEnabled;
```

```
@property(nonatomic, readonly) NSTimeInterval delay;
```

`UIViewAnimating`:

```
(void)startAnimationAfterDelay:(NSTimeInterval)delay;
```

Known issues

- When running in the iPad Pro (9.7 inch) Simulator, the trait collection of `UIScreen.mainScreen` has a `displayGamut` of `sRGB` instead of `P3`, and image assets with wide-gamut content are missing. This affects image assets with images in the `P3` slot as well as images with just an `Any` slot that contains wide-gamut content. These issues do not affect apps running on device.
- 3D Touch haptics do not play unless Keyboard Clicks are turned on in Settings > Sounds.
- A `UIPreviewActionItem` object created with `UIPreviewActionStyleSelected` do not appear with the selected style.
- The `didReceiveLocalNotification:` and `didReceiveRemoteNotification` methods are not called for default action if the app is already running.
- When `UITextField.adjustsFontSizeToFitWidth` is set to `true`, `UITextField` now scales different fonts inside an attributed string set in `attributedText` instead of scaling the font and applying it to the whole string. This means font information is no longer lost when auto-scaling.
- The `-[UIImage imageWithHorizontallyFlippedOrientation]` method is missing from the `UIImage` interface in iOS 10 beta 1.
- Flippable or direction-specific images assigned to a `UIButton` object's image do not flip.
Workaround: For images in asset catalogs, set the image asset's `Render As` setting to `Original Image`. For images created in code, set the image's `renderingMode` property to `.AlwaysOriginal` before adding it to the `UIImageAsset`.
- Defaults to `NO`. Set if you need to manage the hit testing of animating view hierarchies
`@property(n nonatomic, getter=isManualHitTestingEnabled) BOOL manualHitTestingEnabled;`
- In iOS 10, the pasteboard can only be accessed from the main thread. This can cause some apps to crash if they assume they won't get `nil` back on pasteboard access outside the main thread. This is expected to be resolved in a future beta of iOS 10.
- The `changeCount` does not update for `pasteboardWithName` and `pasteboardWithUniqueName`.

Watch App

For an Apple Watch running watchOS 2.x or earlier paired to an iPhone running iOS 10 beta 1, you will not be able to manage Friends from within the Watch app, because the settings option for it is not shown.

Workaround: Add new friends to your groups by using the Friends interface on Apple Watch.

Widgets

- The first time you debug a widget (that is, a Today extension) on a device, it does not show as a possible extension.
Workaround: Debug again for the extension to show up.
- Widgets do not work in the Simulator on subsequent installs.

Workaround: Erase Content & Settings between installs.

- Legacy widgets may be cut off.

Xcode

- Setting the DYLD_PRINT_STATISTICS environment variable in Xcode does not work for iOS devices in iOS 10 beta 1.
- On the first launch after a device settings erase, the hardware keyboard appears to be toggled and the menu state does not be correct.

Workaround: Select and then deselect the hardware keyboard menu.

- If there is a space in the name of the Xcode app or any ancestor folder, the Simulator fails to launch and asset catalogs fail to compile.

Workaround: Avoid using spaces in Xcode app names. Additionally, Xcode should reside in a path with no spaces.

- If a StickerSequence is added to a sticker pack and left blank, or if frames of different sizes are added, the sticker pack app is blank when deployed.

Workaround: Add sticker frames of the same size.

- If a messages extension in Swift is re-deployed, the code changes are not reflected and a debug session is not established.

Workaround: Delete extensions on the device before each re-deploy.

- Date pickers created in Storyboards may not lay out properly.
- Occasionally, using Command-Shift-HH from the Home screen will not invoke the app switcher.

Workaround: Launch any app before using Command-Shift-HH.